18003

NOAA nautical charts are constructed to exacting standards and are designed to promote safe navigation. Since our waterways are subject to continual change, the National Ocean Service encourages chart users to submit corrections or comments for the improvement of this product to the Director, Charting and Geodetic Services (N/CG22), National Ocean Service, NOAA, Rockville, Maryland 20852. By working together, we can make our activities safer and more enjoyable.

Thomas J. Maginnis
Assistant Administrator for Ocean Services
and Coastal Zone Management

Formerly C&GS 5027, 1st Ed. May 1949 G-1948-726

Nautical Chart Catalog No. 2, Panels C, H

SOUNDINGS IN FATHOMS

18003 OMEGA OVERPRINTED

18003 OMEGA OVERPRINTED

VANCOUVER ISLAND

STRAIT OF GEORGIA

STRAIT OF JUAN DE FUCA

PUGET SOUND

Chart 18421

Chart 18465

Chart 18441

Chart 18448

Blaine
Bellingham
Victoria
Port Angeles
Everett
SEATTLE
Bremerton
TACOMA
Olympia
Aberdeen
Centralia
Chehalis
Long Beach
Astoria
Tillamook Hd
Cape Falcon
Cape Meares
Cape Lookout
Cape Kiwanda
Cascade Head
Cape Foulweather
Yaquina Head
Newport
Corvallis
Albany
SALEM
PORTLAND
Oregon City
Cape Blanco
Cape Sebastian
Port Orford
Gold Beach
Brookings
Crescent City

OMEGA LINEAR INTERPOLATOR

NOTE C
TRAFFIC SEPARATION SYSTEM

One-way traffic lanes overprinted on this chart are RECOMMENDED for use by all vessels traveling between the points involved. They have been designed to aid in the prevention of collisions in the Strait of Juan De Fuca waters, but are not intended in any way to supersede or to alter the applicable Rules of the Road. Separation zones are intended to separate inbound and outbound traffic and to be free of ship traffic. Separation zones should not be used except for crossing purposes. When crossing traffic lanes and separation zones use extreme caution.

Precautionary Areas have been established where major traffic lanes merge and cross the traffic separation system. It is recommended that vessels proceed with caution in these areas. Whenever practical vessels entering or leaving the system should do so at these precautionary areas.

OMEGA
GENERAL EXPLANATION

Basic Frequency 10.2 kHz

PAIRS ON THIS CHART
CD CH DH CE DE

OMEGA STATIONS: (A — Aldra, Norway) (B — Monrovia, Liberia) (C — Haiku, Hawaii) (D — La Moure, North Dakota) (E — La Reunion, Island, France) (F — Golfo Nuevo, Argentina) (G — Woodside, Australia) (H — Toyohira, Japan)

All users are cautioned that the OMEGA Navigation System is, in its implementation stage, Station "OFF-AIR" periods and system changes will occur in the future. Such occurrences will be promulgated by Notice to Mariners and radio-navigational warning messages. At present the worldwide accuracy and reliability of the OMEGA System can not be precisely determined. THEREFORE, POSITIONING INFORMATION DERIVED FROM THE OMEGA NAVIGATION SYSTEM SHOULD NOT BE TOTALLY RELIED UPON WITHOUT REFERENCE TO OTHER NAVIGATIONAL POSITIONING METHODS.

When the OMEGA System is fully operational and its worldwide positioning accuracy verified, it is anticipated that the RMS accuracy will be approximately one nautical mile for daytime propagation paths and two nautical miles for nighttime propagation paths.

Propagation corrections must be used for plotting and reading OMEGA positions on this chart. OMEGA Propagation Correction publications are released and listed with price in Defense Mapping Agency Pub. 1-N-A. Pub. 1-N-A is available at Defense Mapping Agency sales agents and many National Ocean Survey sales agents, or it may be obtained directly from:

Defense Mapping Agency
Office of Distribution Services
Attention: DDCP
Washington, D.C. 20315

POLLUTION REPORTS

Report all spills of oil and hazardous substances to the National Response Center via 800-424-8802 (toll free), or to the nearest U.S. Coast Guard facility if telephone communication is impossible (33 CFR 153).

NOTE S

Regulations for Ocean Dumping Sites are contained in 40 CFR, Parts 220-229. Additional information concerning the regulations and requirements for use of the sites may be obtained from Environmental Protection Agency (EPA). See U.S. Coast Pilots appendix for addresses of EPA offices.

AIDS TO NAVIGATION

Consult U.S. Coast Guard Light List for supplemental information concerning aids to navigation. See Canadian List of Lights, Buoys and Fog Signals for information not included in the U.S. Coast Guard Light List.

CAUTION

Only marine radiobeacons have been controlled for surface use. Limitations on the use of certain other radio signals as aids to marine navigation can be found in the U.S. Coast Guard Light Lists, and Defense Mapping Agency Publication 117.

Radio direction-finder bearings to commercial broadcasting stations are subject to error and should be used with caution.
Station positions are shown thus:
⊙Accurate location ○Approximate location

WARNING

The prudent mariner will not rely solely on any single aid to navigation, particularly on floating aids. See U.S. Coast Guard Light List and U.S. Coast Pilot for details.

WASHINGTON

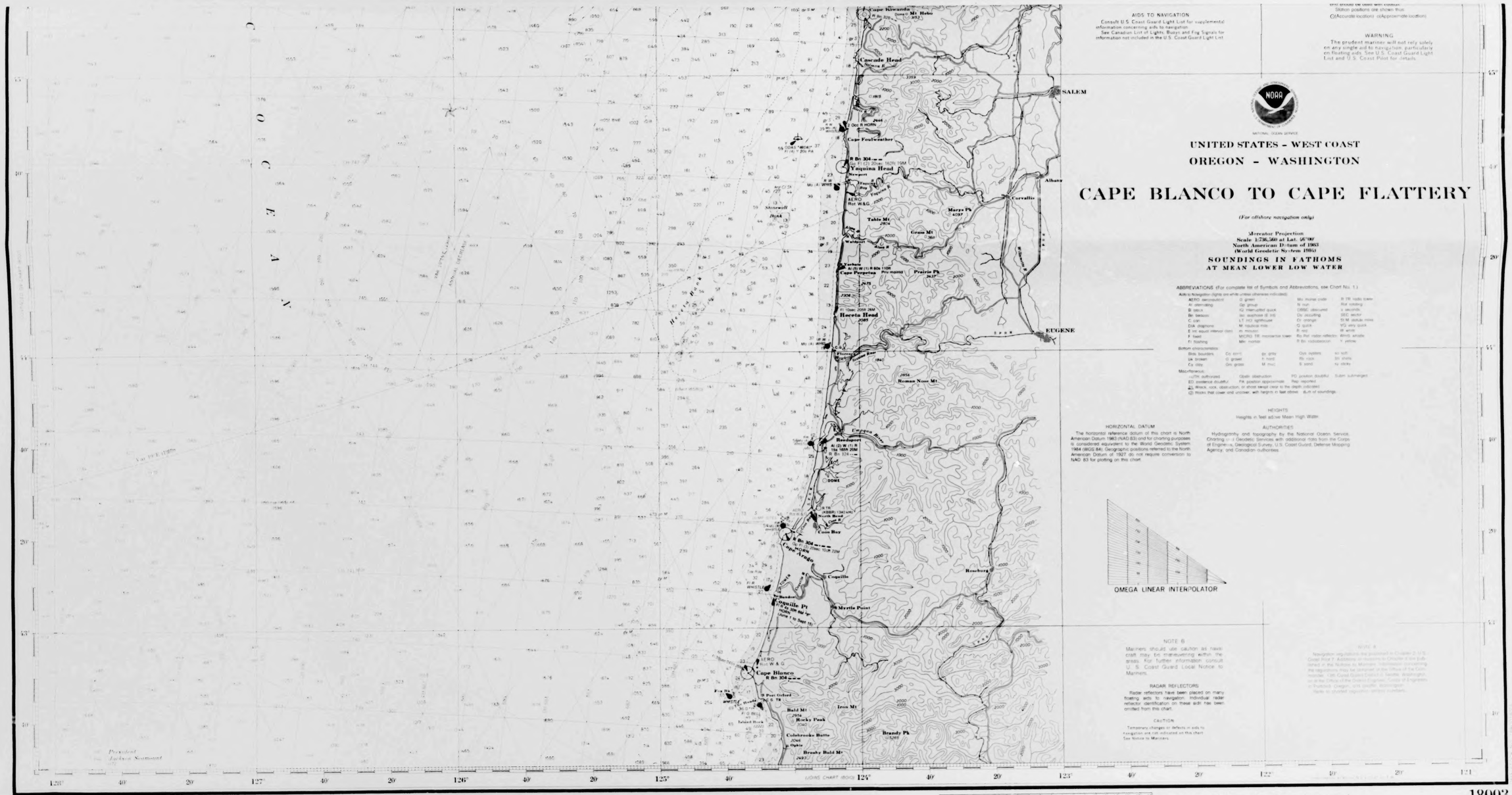
OREGON

UNITED STATES - WEST COAST
OREGON - WASHINGTON

CAPE BLANCO TO CAPE FLATTERY

(For offshore navigation only)

Mercator Projection


Cape Blanco
Cape Sebastian
Cape Ferrelo
Cape Orford
Cape Gregory
Cape Mendocino
Humboldt Bay
Eureka
Arcata
Crescent City
Trinidad Head
Cape Mt
Cape Sarichef
Cape Lazo
Cape Scott
Cape Flattery
Cape Beale
Cape Flattery
Cape Disappointment
Tillamook Head
Cape Meares
Cape Lookout
Cape Foulweather
Yaquina Head
Cape Perpetua
Heceta Head
Cape Arago
Coquille Pt
Cape Blanco
Cape Orford
Cape Gregory
Cape Mendocino

CAUTION
CHANGES in AUGUST
Aids to navigation and landmarks are being changed in accordance with the International Association of Lighthouse Authorities (IALA) Maritime Buoyage System, Region B. Significant changes to aids to navigation and landmarks affected by this change will be shown on future editions of this chart. Mariners should not rely solely on aids to navigation and landmarks for safety. Navigators are reminded of their responsibility to navigate with caution, to exercise sound navigational judgment, and to give due regard to all information available, including aids to navigation and landmarks. Report discrepancies to the Defense Mapping Agency Hydrographic Center, Washington, D.C. 20390 or to the Commander (oan), Eleventh Coast Guard District, Alameda, California 94501.

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Thomas J. Maginnis
Assistant Administrator for Ocean Services
and Coastal Zone Management

Formerly C&GS 5022. 1st. Ed. May, 1949. S-1946-726

Nautical Chart Catalog No. 2, Panels C-3

SOUNDINGS IN FATHOMS

18003

LORAN-C OVERPRINTED

18003

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LORAN LINEAR INTERPOLATOR

MICROSECONDS

NOTE C
TRAFFIC SEPARATION SYSTEM
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POLLUTION REPORTS
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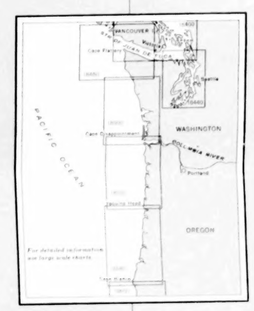

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CAUTION
Only marine radiobeacons have been established for surface use. Limitations on the use of certain other radio signals as aids to marine navigation can be found in the U.S. Coast Guard Light Lists, and Defense Mapping Agency Publication 117.

Radio direction-finder bearings to commercial broadcasting stations are subject to error and should be used with caution.
Station positions are shown thus:
⊙(Accurate location) ◎(Approximate location)

WARNING
The prudent mariner will not rely solely on any single aid to navigation, particularly on floating aids. See U.S. Coast Guard Light List and U.S. Coast Pilot for details.

NOAA
NATIONAL OCEAN SERVICE

UNITED STATES - WEST COAST
OREGON - WASHINGTON

CAPE BLANCO TO CAPE FLATTERY

(For offshore navigation only)

Mercator Projection
Scale 1:736,500 at Lat. 46°00'
North American Datum of 1983
(World Geodetic System 1984)

SOUNDINGS IN FATHOMS
AT MEAN LOWER LOW WATER

List and U.S. Coast Pilot for details.

UNITED STATES - WEST COAST

OREGON - WASHINGTON

CAPE BLANCO TO CAPE FLATTERY

(For offshore navigation only)

Mercator Projection
Scale 1:730,560 at Lat. 46°00'
North American Datum of 1983
(World Geodetic System 1984)

SOUNDINGS IN FATHOMS
AT MEAN LOWER LOW WATER

ABBREVIATIONS (For complete list of Symbols and Abbreviations, see Chart No. 1.)

Aids to Navigation (lights are white unless otherwise indicated)

AERO aeronautical	G green	Mo monse code	R TR radio tower
Al. alternating	Gp group	N nun	Ro rotating
B black	IQ interrupted quick	OBstD obscured	s seconds
Bn beacon	Iso isophase (E Int)	Oc occulting	SEC sector
C con	LT HO lighthouse	Or orange	St M statute miles
DIA diaphone	M nautical mile	Q quick	VQ very quick
E int equal interval (Iso)	m minutes	R red	W white
F fixed	MICRO TR microwave tower	Ra Ref radar reflector	WHIS whistle
Fl flashing	Mkr marker	R Bn radiobeacon	Y yellow

Bottom characteristics

Bldr boulders	Co coral	Gr gritty	Oys oysters	sn soft
Bk broken	C gravel	h hard	Pb rock	Sh shells
Cy clay	Grs grass	M mud	S sand	sy sticky

Miscellaneous

AUTH authorized	Obstn obstruction	PD position doubtful	Submgd submerged
ED existence doubtful	PA position approximate	Rep reported	

Wreck, rock, obstruction, or shoal swept clear to the depth indicated.
(2) Rocks that cover and uncover, with heights in feet above datum of soundings.

HEIGHTS

Heights in feet above Mean High Water.

AUTHORITIES

Hydrography and topography by the National Ocean Service, Charting and Geodetic Services with additional data from the Corps of Engineers, Geological Survey, U.S. Coast Guard, Defense Mapping Agency, and Canadian authorities.

HORIZONTAL DATUM

The horizontal reference datum of this chart is North American Datum 1983 (NAD 83) and for charting purposes is considered equivalent to the World Geodetic System 1984 (WGS 84). Geographic positions referred to the North American Datum of 1927 do not require conversion to NAD 83 for plotting on this chart.

LORAN-C

GENERAL EXPLANATION

LORAN-C FREQUENCY 100kHz

PULSE REPETITION INTERVAL

9940	99,400 Microseconds
5990	59,900 Microseconds

STATION TYPE DESIGNATORS (Not individual ste. Non letter designators)

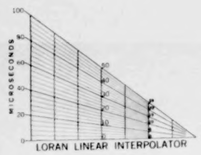
M	Master
W	Secondary
X	Secondary
Y	Secondary
Z	Secondary

EXAMPLE: 9940-X

RATES ON THIS CHART

9940-W	9940-X	9940-Y	
5990-X	5990-Y	5990-Z	

The Loran-C lines of position overprinted on this chart have been prepared for use with ground wave signals and are presently compensated only for average theoretical propagation delays which have not yet been verified by observed data. Mariners are cautioned not to rely entirely on the lattices in inshore waters. Skywave corrections are not provided.



LORAN LINEAR INTERPOLATOR

NOTE A

Navigation regulations are published in Chapter 2, U.S. Coast Pilot 7. Additions or revisions to Chapter 2 are published in the Notices to Mariners. Information concerning the regulations may be obtained at the Office of the Commander, 13th Coast Guard District in Seattle, Washington, or at the Office of the District Engineer, Corps of Engineers in Portland, Oregon, and Seattle, Washington.

Refer to charted regulation section numbers.

NOTE B

Mariners should use caution as naval craft may be maneuvering within the areas. For further information, consult U. S. Coast Guard Local Notice to Mariners.

RADAR REFLECTORS

Radar reflectors have been placed on many floating aids to navigation. Individual radar reflector identification on these aids has been omitted from this chart.

CAUTION

Temporary changes or defects in aids to navigation are not indicated on this chart. See Notice to Mariners.

18003
LORAN-C OVERPRINTED

SOUNDINGS IN FATHOMS

For OMEGA coverage see reverse side

Published at Washington, D.C.
U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL OCEAN SERVICE

(Cape Blanco to Cape Flattery)

18003
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